

REMARKS

Please cancel claims 1-11 and 17-21 without prejudice. Applicant will be considering pursuing these claims in a continuation or divisional application.

Prior Art Rejections

Independent Claim 12

The Examiner rejected claims 12, 16, 22, 23 and 24 as unpatentable over Staerzl (U. S. 5,804,712). We submit however that Staerzl does not disclose or suggest a sensing circuit comprising elements connected "to determine a change in a voltage across the thermistor" much less comparing that change to a threshold, as required by claim 12.

Rather, Staerzl measures the change in voltage between two different resistors during a single instance in time. Staerzl compares the resistance of an upstream resistor (and its corresponding voltage) with the resistance of a downstream resistor (and its corresponding voltage) (col. 3, lines 30-36). Nowhere does Staerzl disclose or suggest measuring the change in voltage across either of his two resistors.

In certain embodiments, Applicant uses a sample-and-hold circuit to evaluate the change in voltage across a single thermistor and to compare the resulting value to a threshold value.

For these reasons, we submit that claim 12 is patentable over Staerzl.

Because claims 16, 22, 23 and 24 depend from claim 12, we submit that these claims are patentable over the cited art for at least the same reason that independent claim 12 is patentable.

The Examiner also rejected claims 13-15 as unpatentable over Staerzl in view of one or both of Mitra (U.S. 5,422,807) and Iida (U.S. 4,483,295).

Mitra was cited as disclosing a semiconductor microcontroller with the capability to perform analog to digital conversions of an analog signal. Iida was cited as disclosing a control device for detecting the occurrence of knocking, a crank angle sensor, an engine operating condition control device, and a control circuit for identifying one of the engine cylinders in which knocking has actually occurred. Neither Mitra nor Iida are understood to add anything to the disclosure of Staerzl that would remedy its foregoing deficiencies against the claims.

Thus, because claims 13-15 depend from claim 12, we submit that these claims are patentable over the cited art for at least the same reason that independent claim 12 is patentable.

Independent Claim 25

The Examiner also rejected independent claim 25 as obvious under Staerzl in view of Mitra and Iida.

As argued in conjunction with claim 12, Staerzl fails to disclose or suggest a sensing circuit comprising elements connected "to determine a change in a voltage across the thermistor, and to compare the change to a threshold." Neither Mitra nor Iida are understood to add anything to the disclosure of Staerzl that would remedy its foregoing deficiencies against the claims.

Thus, we submit that claim 25 is patentable over the cited art for at least the same reason that independent claim 12 is patentable.

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Applicant submits that all claims are in condition for allowance, and such action is requested. No fee is believed to be due for this Amendment; however, if any fees are due, please apply them to Deposit Account 06-1050, reference 04513-023001.

Respectfully submitted,

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